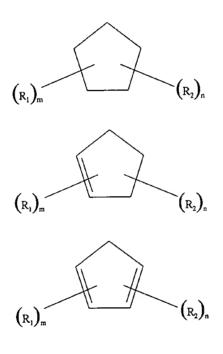
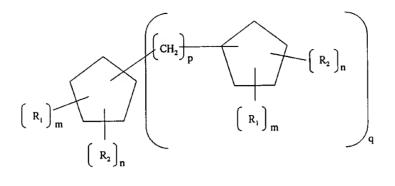
a lubricant layer over the magnetic layer, the lubricant layer including a compound selected from the group consisting of hydrocarbyl-substituted cyclopentane, hydrocarbyl-substituted cyclopentane, hydrocarbyl-substituted cyclopentadiene, and mixtures thereof; and wherein the hydrocarbyl consists of carbon and hydrogen.

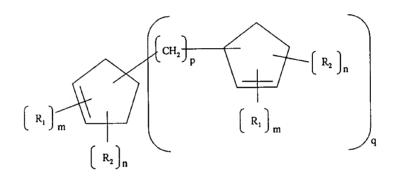
2. (Twice Amended) The magnetic recording medium of claim 1, wherein the lubricant layer includes a hydrocarbyl-substituted cyclopentane, a hydrocarbyl-substituted cyclopentane, or a hydrocarbyl-substituted cyclopentadiene as represented by the following respective formulas:

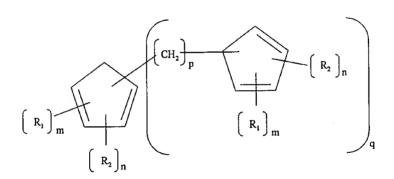


wherein  $R_1$  and  $R_2$  are respectively a hydrocarbyl group, and m and hare respectively zeror a positive integer and the sum of m + n is greater than zero; and wherein the hydrocarbyl consists of carbon and hydrogen.

11. (Twice Amended) The magnetic recording medium of claim 1, wherein the hydrocarbyl-substituted cyclopentane, hydrocarbyl-substituted cyclopentene, or hydrocarbyl-substituted cyclopentadiene are represented by the following respective formulas:

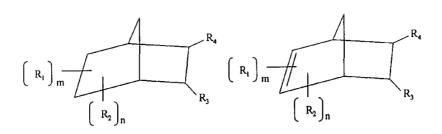






wherein p is 1, 2, 3, ..., or 10; q is 1, 2, 3, ..., or 10; m and n are zero or a positive integer;  $R_1$  and  $R_2$  are individually a hydrocarbyl group; and wherein the hydrocarbyl consists of carbon and hydrogen.

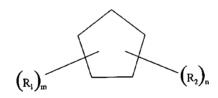
12. (Twice Amended) The magnetic recording medium of claim 1, wherein the hydrocarbyl-substituted cyclopentane, hydrocarbyl-substituted cyclopentene, or hydrocarbyl-substituted cyclopentadiene are represented by the following respective formulas:

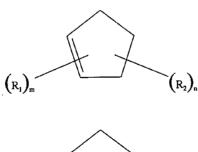


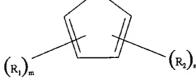
wherein m and n are zero or a positive integers;  $R_1$  and  $R_2$  individually are a hydrocarbyl group;  $R_3$  and  $R_4$  individually are hydrocarbyl; and

wherein the hydrocarbyl consists of carbon and hydrogen.

14. (Twice Amended) The magnetic recording medium of claim 13, wherein the lubricant layer includes a hydrocarbyl-substituted cyclopentane, a hydrocarbyl-substituted cyclopentene, or a hydrocarbyl-substituted cyclopentadiene as represented by the following respective formulas:



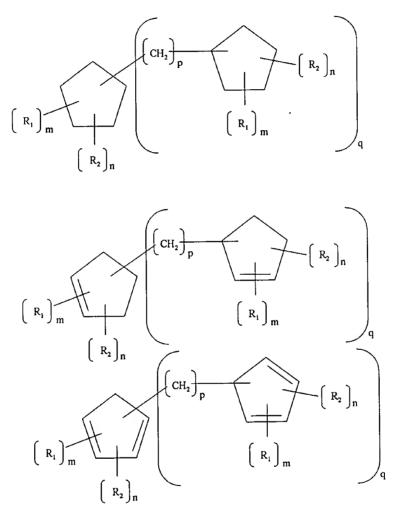




wherein  $R_1$  and  $R_2$  are respectively a hydrocarbyl group, and m and n are respectively zero or a positive integer and the sum of m + n is greater than zero; and

wherein the hydrocarbyl consists of carbon and hydrogen.

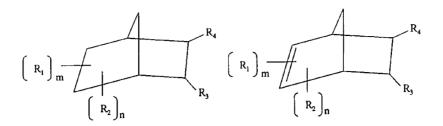
23. (Twice Amended) The magnetic recording medium of claim 13, wherein the hydrocarbyl-substituted cyclopentane, hydrocarbyl-substituted cyclopentene, or hydrocarbyl-substituted cyclopentadiene are represented by the following respective formulas:



wherein p is 1, 2, 3, ..., or 10; q is 1, 2, 3, ..., or 10; m and n are zero or a positive integer;  $R_1$  and  $R_2$  are individually a hydrocarbyl group; and

wherein the hydrocarbyl consists of carbon and hydrogen.

24. (Twice Amended) The magnetic recording medium of claim 13, wherein the hydrocarbyl-substituted cyclopentane, hydrocarbyl-substituted cyclopentene, or hydrocarbyl-substituted cyclopentadiene are represented by the following respective formulas:



wherein m and n are zero or a positive integers;  $R_1$  and  $R_2$  individually are a hydrocarbyl group;  $R_3$  and  $R_4$  individually are hydrocarbyl; and

wherein the hydrocarbyl consists of carbon and hydrogen.

## 25. (Twice Amended) A magnetic head, comprising:

a head; and

a lubricant layer over at least a portion of the head, the lubricant layer including a compound selected from the group consisting of hydrocarbyl substituted cyclopentane, hydrocarbyl substituted cyclopentene, hydrocarbyl substituted cyclopentadiene, and mixtures thereof; and

wherein the hydrocarbyl consists of carbon and hydrogen.

## 26. (Twice Amended) A data storage/retrieval device, comprising:

a magnetic recording medium including a magnetic layer over a support and a lubricant layer over the magnetic layer, the lubricant layer including a compound selected from the group consisting of hydrocarbyl substituted cyclopentane, hydrocarbyl substituted cyclopentane, hydrocarbyl substituted cyclopentadiene, and mixtures thereof; and

a magnetic head adjacent to the magnetic recording medium, the magnetic head sliding on the magnetic recording medium to read and write information on the magnetic recording medium; and

wherein the hydrocarbyl consists of carbon and hydrogen.

## 29. (Twice Amended) A computer, comprising:

a CPU;

a disk drive connected to the CPU so that the disk drive can communicate with the CPU,

the disk drive including:

a magnetic recording medium having a magnetic layer over a support and a lubricant layer over the magnetic layer, the lubricant layer having a compound selected from the group consisting of hydrocarbyl substituted cyclopentane, hydrocarbyl substituted cyclopentadiene, and mixtures thereof; and

a magnetic head adjacent to the magnetic recording medium, the magnetic head sliding on the magnetic recording medium to read and write information on the magnetic recording medium; and

wherein the hydrocarbyl consists of carbon and hydrogen.

30. (Twice Amended) A method of manufacturing a magnetic recording medium, comprising: providing a non-magnetic support;

forming a magnetic layer on the support; and

forming a lubricant layer over the magnetic layer, the lubricant layer including a compound selected from the group consisting of hydrocarbyl substituted cyclopentane, hydrocarbyl substituted cyclopentane, hydrocarbyl substituted cyclopentadiene, and mixtures thereof; and

wherein the hydrocarbyl consists of carbon and hydrogen.

## REMARKS

The Applicants would like to express appreciation to the Examiner for the courtesy extended to Applicants' attorney Benjamin Bai during a telephone interview with Examiner Bernatz on September 10, 2001. During the interview, the Examiners clarified the rejections set forth in the Office Action, and Applicants' attorneys discussed the pending claims, and proposed claim amendments and agreed to review the amendments.

Claims 1-37 are pending in the application, all of which have been rejected. Claims 1, 2, 11, 12, 14, 23 - 26, 29, and 30 have been amended to exclude functionalized hydrocarbyl groups that include anything other than carbon and hydrogen. Support for these amendments can be found, for example, on page 7, lines 2-7. No new matter has been introduced. Claims 3-10 and 15-22 have been canceled but will be re-filed in a continuation upon the disposition of this application.

Now all pending claims recite a limitation that requires the hydrocarbyl include hydrogen and carbon only. In contrast, the Ng patent teaches away from using non-fluorinated substituted